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THEORY AND EMPIRICISM IN THE UNDERSTANDING OF LIFE COURSE DEVELOPMENT

Doing developmental psychology and trying to understand these processes sometimes we should also ask about the role of theory and empiricism in building knowledge on human development in life span. This text is a part of discussion, initiated by Adam Niemczyński, about the importance of the theory of development, and the dominance of empiricism in psychology. The development is theoretical not empirical concept so gathering facts about it should rely on theory. It is difficult to overestimate the importance of theory and reflection about the development and collected empirical data, which are becoming meaningful in the light of a particular theory.

One can hardly disagree with Adam Niemczyński's thesis regarding the dominance of empiricism in psychology and its important position in research on human development. It is not for nothing that the establishment of the world's first psychological laboratory by Wilhelm Wundt has been recognized as the symbolic date of the foundation of psychology, though Wundt not so much established a new discipline as implemented a new method (Stachowski & Dobroczyński, 2008). Wundt's introduction of the experimental method was important for scientific psychology, making it an empirical science on the pattern of natural sciences. According to some scholars, psychologists have become more methodologically rigorous than Wundt himself wanted them to be, or even more so than was the case in other disciplines, such as physics or biology, which have never broken their bonds with philosophy or neglected more general reflection on the problems subjected to empirical verification (cf. Toulmin & Leary, 1985). As historians of psychological thought observe (Stachowski

ki & Dobroczyński, 2008), twentieth-century psychology was much more interested in methodological problems than in the subject matter of research, and the situation seems to be similar today. The dominance of methodological problems in doing psychology is reflected also in the curricula of psychological studies, where classes in methodology occupy an increasing amount of place, which certainly has influence on the beliefs of psychology graduates regarding the key and central issues of this discipline. Fascination with method as well as the belief that it is method that gives psychology the status of a science and determines the chance of building psychological knowledge has taken the form of "dogmatic methodism" (Stachowski & Dobroczyński, 2008), according to which what guarantees success in science is the use of specific methods. It is believed that, in times when the indicator of scientificity is empiricism, psychology as a science must be done within the framework of empirical methodology. What is interesting, refusing to allow any methods other than empirical in science,

empiricism does not attempt to show why empirical evidence is better or more valuable than other evidence, merely stressing that this evidence is provided by empiricism (Indick, 2002). It would be wise to ask if this is a sufficient and convincing argument.

It is worth noting that Wundt did not consider experiment to be the only appropriate method but rather stressed that pure experimental methods are appropriate in the case of a narrow range of mental activity and mental phenomena. He maintained that psychology should remain sensitive to philosophical analysis and claimed that to create true and complete science it was necessary to rely both on experimental methods and on rational analyses (Toulmin & Leary, 1985). Distinguishing two currents in psychology: experimental and historical-cultural, Wundt did not present a vision of their integration, seeing prospects only for historical-cultural psychology, which – according to his predictions, already known today to have been wrong – was to dominate experimental psychology, also referred to as physiological (Stachowski, 2002).

Lev Vygotsky made an attempt to unify these two currents, giving rise to the historical-cultural theory of development, according to which development is conditioned both by biological factors and by social and cultural experience. Taking into account the complexity and multiple determinants of development, he presented the specificity of human development by pointing to the development of higher mental functions (Stachowski & Dobroczyński 2008).

Introducing experiment into psychological research and stressing its role in building psychology as a science, Wundt treated it as a tool supporting self-observation, which means he did not entirely negate the importance of the previously used introspection but rather replaced philosophical introspection with experimental introspection (Stachowski, 2002).

A figure who made a significant contribution to building psychology as an empirical science, somewhat forgotten by psychologists, was Brentano, who also wanted psychology to be based on experience. He understood it differently than Wundt, however. Addressing the issue of inner experience and having distinguished contents from acts in mental processes, Brentano focused on the latter, whereas Wundt as well as other psychologists of his times focused on contents. The method affording access to mental acts was supposed to be inner perception, affording a possibility of accessing the phenomena of one's own mental life. Believing inner observation to be impossible, he rejected introspection and asserted that a person could study his or her own experiences only retrospectively (Tatarkiewicz 1990; Stachowski 2002).

Striving for objectivity, certainty, and accuracy in psychology, we rely on experimental methods, quantitative methods, and statistical measures, often deprecating qualitative methods, not to mention reflection or intellectual speculation on human nature and development. Reliance on physicalism and the belief in the possibility of explaining human behavior based on physiological mechanisms carries a risk of reductionism. The development of neuroscience, intensive in recent years, additionally enhances this direction of thinking and doing psychology, leading to the belief that we will get to know the human being by getting to know the work of his or her brain, and thus creating an illusion that we can abandon the study of the mind. The following question arises: is it possible to understand the human being and his or her development solely on the basis of biological processes? Does the essence of human psychological development consist in gradually moving beyond that which is biological – in transgressing one's biological nature? Is that which constitutes the essence of the human being and his or her development

fully observable through the senses? Does ignoring first-person data and adopting the third-person perspective with its focus on the study of brain activity not lead to resignation from the personal dimension and does it not reduce the person to the physical or physiological dimension?

It is impossible to understand human nature and development without taking into account the three dimensions in which a person functions: soma, psyche, and polis (Brzezińska, 2007). This implies the necessity of considering not only biological factors but also environmental and cultural ones as well as interrelations among them when attempting to describe and understand life course human development; it also implies the necessity of considering that which comes from and affects the individual. To understand the human being with all the wealth of his or her experience and with all the complexity of mental life, psychology cannot deprive itself of the first-person perspective and give up what is accessible only to the experiencing self.

At present, immense weight is attached to empirical research, data collection, and increasingly sophisticated statistical analyses that are supposed to yield answers to questions concerning the course, patterns, and determinants of development. One can ask the following question: is it necessary for empirical research to be based on a theory, or is it legitimate to be content with facts only? Observing the focus of contemporary psychology on empirical research, research instruments, and statistical analyses, which are often not accompanied by more general reflection on development and its essence, and seeing that the research conducted is frequently not firmly based on theory, one has the impression that some scholars believe that facts will speak for themselves and that the results of more and more advanced statistical analyses will replace reflection on human development, its logic, and its aim. The focus

on methods and their psychometric properties sometimes leads to a situation in which one may have the impression that the researcher does not always know what he or she is investigating but knows that he or she is investigating it well, deriving this information from appropriate statistical measures. William Indick (2002) observes that, in modern science, the force of argument is often reduced to symbols such as p or r , and the power of statistics is often equated with the power of intellect.

Without negating the legitimacy and importance of empirical studies in the process of gaining knowledge and understanding of the human being and human development, it is worth stressing that their value and contribution to the building of our knowledge about the person developing in the course of life is determined by their being embedded and considered in the context of theory – by more general reflection on them.

Kelly (1955) believed that theory makes it possible to link facts so that, having many of them, we can explain them together. Thus, theory enables us to organize observations and give meaning to the information collected. As the French mathematician Jules-Henri Poincaré said, “Science is built of facts the way a house is built of bricks: but an accumulation of facts is no more science than a pile of bricks is a house.” Facts alone are not enough; their understanding and organization requires a theory, which also indicates the direction and area of research. In the case of the psychology of human development, the role of theory seems to be special because, as Maria Przetacznik-Gierowska says, “Theoretical assumptions and premises as well as value judgments seem to be... an inevitable step in constructing the concept of development. The definition of this concept should precede data collection rather than follow from data” (Przetacznik-Gierowska, 1993, p. 13). Agreeing with the author that development is a theoretical rather than empirical

concept, it is hardly possible not to share the opinion that in order to collect facts concerning development it is necessary to rely on theory and to adopt a particular understanding of development. It is theory that will determine what kind of changes that can be empirically investigated we recognize as representing development. Empirical research alone will not allow us to formulate a definition of development or to decide whether or not a particular observed change is a developmental change. Only by analyzing and interpreting the collected empirical data in the light of a particular theory is it possible to give meaning to them and to assess to what extent they attest to development.

In order to determine what individual human development is and what nature it has, it is necessary to adopt certain assumptions regarding human nature. Is man an active and creative being, having an innate capacity for development and self-improvement and capable of creating himself/herself and the path of his or her development – or a reactive being, molded by the environment and passively subject to its influences? Each theory of development is based on certain anthropological and methodological assumptions, more or less explicit. Assumptions regarding human nature largely determine our thinking not only about the mechanisms and determinants of development but also about its direction, aim, and essence. These assumptions cannot be empirically tested, however. Empirical research does not make it possible to ultimately decide what human nature and development are like. It is possible to approach the knowledge of their nature, but empiricism does not allow for making definitive conclusions.

Striving to understand and capture the meaning of development, we also to some extent refer to the meaning of human life, in which this development takes place and whose important aspect it constitutes. Capturing the essence of human life and placing it in the con-

text of development is a challenge for the theory of individual human development. Could it respond to this challenge while remaining in the positivist paradigm, relying exclusively on what can be empirically investigated and on what is observable through the senses?

There arises the question regarding the possibility of formulating a life course theory of development with its complexity and multiple aspects only on the basis of facts collected by means of tools developed by empirical psychology, without intellectual speculation on human nature and development.

It is also worth reflecting on whether developmental psychology should only describe “what is” or whether it should address “what should be” – in other words, should the object of interest of developmental psychology be restricted to facts – to describing and explaining them – or should developmental psychology have a normative character? Is it possible to define the logic of developmental changes and explain why a higher stage is better than a lower one, why we treat the observed change as a manifestation of development, if we have no normative criterion of development? After all, the very fact that a change takes place, that a certain characteristic or ability appears at a later stage of life, and that older people differ in some respects from younger ones does not necessarily mean that development has occurred. If any change or novelty were to attest to development, then we would have to conclude that everything that changes develops, and we would thus lose the meaning of the concept of development and the specificity of developmental change (cf. Smith & Voneche, 2008). A question arises: can developmental change criteria be inferred from empiricism? Is it possible to determine the aim of development solely on the basis of empirical research and on what is observable through the senses?

In my opinion, it is not possible to do psychology in a sensible way without openness to

reflection and to logical rather than only empirical arguments, without the acceptance of specific assumptions, without evaluating, and – finally – without reference to philosophy and a broader perspective on development. Just like the development of any field of science, the development of the psychology of individual development is possible thanks to constantly posing new questions, discerning new problems, thanks to interpretations of human behavior going beyond merely commenting on the results of statistical analyses – thanks to intellectual speculation and “scientific imagination” (Toulmin & Leary, 1985). Far from negating the importance of empirical research and statistical analyses, it is hardly legitimate to accept that science is to be restricted to them. It seems that the best way is the middle way – or, in other words, a dialectical approach, combining empirical research, the psychometric approach, and quantitative methods with more general reflection and intellectual speculation.

Professor Adam Niemczyński’s initiative of reflection on the theory of individual human development and its significance in empirical research is highly valuable. Reflection on what and how we do and from where we derive the belief that we do it well is immensely important. And if even if the diverse positions on this issue do not change in the course of the debate, its valuable outcome will be a greater awareness of the path we have chosen in seeking the essence, meaning, and purpose of individual human de-

velopment, an awareness of its advantages and limitations, and perhaps greater openness to those who have chosen a different path.

REFERENCES

- Brzezińska A. I. (2000). *Spółeczna psychologia rozwoju*. Warszawa: Wydawnictwo Naukowe Scholar.
- Indick W. (2002). Fight the Power; The Limits of Empiricism and the Costs of Positivist Rigor. *The Journal of Psychology*, 136 (1), 21-36.
- Kelly G.A. (1955) *The Psychology of Personal Constructs Volume 1: A Theory of Personality*. New York, US: Norton.
- Przetacznik-Gierowska M. (1993). Psychologia rozwoju dzieci i młodzieży a psychologia rozwoju człowieka. Przełom czy kontynuacja? *Kwartalnik Polskiej Psychologii Rozwojowej*, 1 (1), 3-20.
- Stachowski R. (2002). Historia psychologii – od Wundta do czasów najnowszych. W: J. Strelau (red.), *Psychologia. Podręcznik akademicki*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Stachowski R., Dobroczyński B. (2008). Historia psychologii – od Wundta do czasów najnowszych. W: J. Strelau, D. Doliński (red.), *Psychologia. Podręcznik akademicki*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Smith L., Voneche J. (2008). *Norms in Human Development*. Cambridge: Cambridge University Press.
- Tatarkiewicz W. (1990). *Historia filozofii*. Tom 3. Warszawa: PWN.
- Toulmin S., Leary D. E., (1985). The Cult of Empiricism in Psychology, and Beyond. W: Koch, Sigmund (Ed); Leary, David E. (red.), *.A century of psychology as science*. (s. 594-617). Washington, DC, US: American Psychological Association, xiii.

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TEORIA I EMPIRIA W ROZUMIENIU ROZWOJU W BIEGU ŻYCIA

STRESZCZENIE

Uprawiając psychologię rozwoju człowieka i starając się jak najpełniej rozwój ten zrozumieć, warto czasami zadać pytanie o rolę teorii i empirii w budowaniu wiedzy na temat rozwoju człowieka w biegu jego życia. Niniejszy tekst to głos w dyskusji zainicjowanej przez Adama Niemczyńskiego wokół znaczenia teorii rozwoju, a także dominacji empiryzmu w psychologii. Przyjmując, że rozwój to pojęcie teoretyczne, a nie empiryczne, bo z empirii nie wyprowadzimy definicji rozwoju, chcąc gromadzić fakty na temat rozwoju, trzeba oprzeć się na teorii. Trudno zatem przecenić znaczenie teorii i refleksji wokół rozwoju i gromadzonych danych empirycznych, które nabierają znaczenia i sensu w świetle określonej teorii.